Review of the 5/4/03 Tornado Outbreak

National Weather Service Kansas City, MO

The 2003 severe weather season featured one of the **most intense tornado outbreaks in far eastern Kansas in several years**. A total of six tornadoes touched down in far northeast, east central and southeast Kansas the afternoon of **May 4**th, **2003**. Two of these tornadoes strengthened to violent tornadoes, receiving a rating of F4 on the Fujita tornado damage scale.

The morning of May 4th started off cloudy and relatively cool across far eastern Kansas - not exactly tornado weather by any means. A warm front was located to the west across portions of east central Kansas. This front moved east through the morning and into western Missouri by early afternoon. Clearing skies and southeast winds brought plenty of warmth and humidity into the eastern third of the state, setting the stage for the violent weather to come that afternoon.

Thunderstorms enupted across far eastern and northeast Kansas around 2:30 p.m. These storms quickly became severe. The **first tornado of the day** touched down in southern Leavenworth County, near the Linwood area. This tornado produced F2 damage in an area near 166th and Kansas Road. Another tornado touched down just northeast of the city of Leavenworth in open county on the Ft. Leavenworth grounds. This tornado quickly moved northeast into Missouri.

The supercell thunders torm which spawned the tornado in southern Leaven worth County,

produced its second tornado to the northeast in WyandotteCounty. The second tornado touched down just north-northwest of the Kansas Speedway at approximately 4:18 p.m. This tornado initially produced F0 to F1 damage, but it did produce an area of F3 damage to two homes, just south of Parallel Parkway near Interstate 435 (picture right). The tornado grew in width to near 500 yards in Kansas City, Kansas, where instances of F4 damage were noted around 91st and Leavenworth Road. The tornado continued to produce F2 to F3 damage northeast to near 84th Terrace north of Leavenworth Road. The tornado continued northeast through Wyandotte County, where another instance of F4 damage was noted near 79th Street and Cernech. Considerable structural damage was noted in this location, along with four



150 foot-tall metal power poles engineered to withstand **maximum winds of over 200 mph.** The tornado proceeded to produce F1 to occasional F2 damage up to the Missouri River.

Based on air surveys, the tomado passed just north of the power plant in northeast Wyandotte County, skirted along the Missouri River, and eventually crossed east into Platte County near Riverside and Parkville around 4:30 p.m. This tornado took two lives and left over 30 injuries in its wake. These tornadoes produced nearly \$20 million in damage, and the violent tornado in Wyandotte County was the first occurrence of an F4 or greater tornado in the Kansas City area in 26 years

Further south, a developing supercell thunderstorm produced a brief tornado in open country, in southeast Miami County near the city of New Lancaster. This tornado quickly moved northeast into Missouri, leaving very little damage in its wake.

Two intense supercell thunderstorms then developed further south, across portions of

southeast Kansas. One produced a tornado which tore through portions of **Crawford County**. This tornado touched down shortly after 4:30 p.m. in Neosho County, and it quickly intensified into a violent F4 tornado (picture right) as it moved across Crawford County. This tornado narrowly missed the city of Pittsburg as it passed northwest of that city and instead tore through the Ringo and Franklin areas. In the wake of its **27 mile path** across Crawford County. the tornado killed three people in Crawford County and left over \$7 million in damage. The tornado also took one additional life and produced over \$5 million in damage once it crossed the state line into Missouri.



The last of the Kansas tornadoes on May 4th struck in Cherokee County. The tornado touched down around 5:30 p.m. north of Chetopa in Labette County, then quickly moved east-northeast into Cherokee County. The tornado produced the greatest damage south of Columbus and north of Galena. All together, the tornado **took three lives** in Cherokee County and left 19 injured, in addition to producing nearly \$4 million in damage. One notable miracle from the Cherokee County tornado was a farm home with a mother and three children, that was spared the full brunt of the tornado. The home was located about seven miles northeast of Melrose, where the tornado produced F-2 damage. The tornado was on a direct path to the home, but it only damaged the roof and windows. Several large trees right next to the house were uprooted or snapped off, indicating the power of the tornado.

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